



R18 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
(Autonomous, Accredited by NAAC with 'A' Grade)

Subject code: 2E7EF

B.Tech VII Semester Supplementary Examinations, July 2022

COMPUTER GRAPHICS
(COMPUTER SCIENCE & ENGINEERING)

Maximum Marks: 70

Date:04.07.2022 Duration: 3 hours

- Note: 1. This question paper contains two parts A and B.
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

- 1 Define Computer Graphics.
- 2 What is a work station?
- 3 What is the process of translation?
- 4 What do you mean by 2D viewing?
- 5 Define B-Spline curve.
- 6 Define scaling.
- 7 Define depth sorting.
- 8 What is an illumination model?
- 9 Define the term computer animation.
- 10 Define raster animation.

(10x2M=20 Marks)

Part-B

Answer All the following questions.

(10MX 5=50Marks)

- 11 Explain briefly about different video display devices. (10M)
OR
- 12 Explain the working of DDA line drawing algorithm with example. (10M)
- 13 Explain two-dimensional Translation and Scaling with example. (10M)
OR
- 14 Describe how to clip the given lines using Cohen - Sutherland line clipping algorithm. Explain the above with suitable example and equations. (10M)
- 15 Determine the blending functions for cubic (i.e. $n = 3$) Bezier Curve and also list out the properties of the Bezier Curve. (10M)
OR
- 16 Demonstrate any three types of 3D rotation with equations with diagram (10M)

17 Explain the BSP tree method with suitable diagram(10M)

OR

18 Explain about the different Surface rendering Methods(10M)

19 Discuss in detail about design of animation sequence and general computer animation functions. (10M)

OR

20 A. Discuss briefly about raster animation(5M)

B. Discuss briefly about key frame systems, motion specifications. (5M)